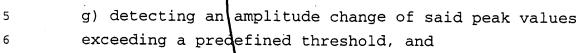
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\sim	Glaims
7	A method for determining the position of a constant
$\frac{\mathcal{C}}{2}$	frequency interval in a telecommunication signal, in
3	particular a frequency correction burst, said method
4	comprising the steps of:
. 5	
6	a) receiving said delecommunication signal;
7	
8	b) detecting an occurrence of said constant frequency
9	interval in said telecommunication signal;
10	
11	c) obtaining a plurality of noise-reduced signal values
12	by a noise-reducing prodessing of at least a part of
13	said constant frequency Interval in sais
14	telecommunication signal;
15	
16	d) using said noise-reduced signal values for adapting
17	a filter to the frequency of said constant frequency
18	interval;
19	
20	e) using said adapted filter t ϕ filter said
21	telecommunication signal for generating filtered output
22	values; and
23	
24	f) determining a predefined reference point of said
25	constant frequency interval on the basis of said
26	filtered output values.

- filtered output values.
- The method of claim 1, wherein said predefined 1 reference point is one of the beginning and the end of said 2 constant frequency interval in said telecommunication signal.
- The method of claim 1, wherein said step f) comprises: determining peak values of said filtered output values of said adapted filter, and at least one of:



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- h) detecting a non-periodic time interval between said peak values.
- 1 4. The method of claims 1, wherein said filter is a FIR
 2 bandpass filter whose filter coefficients are at least some
 3 of said noise-reduced signal values.
- 1 5. The method of claim 4, wherein said filter coefficients
- of said filter are chosen to be a consecutive sequence of
- 3 said noise-reduced signal values representing essentially an
- 4 integral number of full cycles of said noise-reduced signal
- 5 values.
- 6. The method of claims 1, wherein each noise-reduced
- signal value is an auto-correlation value or a cross-
- 3 correlation value between a first and a second section of
- 4 said telecommunication signal, said first and said second
- section being displaced by a varying displacement.
- 1 7. The method of claim 6, where in said occurrence of said
- 2 constant frequency interval in said telecommunication signal
 - is detected on the basis of said noise-reduced signal
- 4 values.

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- 1 8. The method of laims 1, wherein said telecommunication
- signal is a wireless pobile telephony signal and preferably
- 3 a GSM baseband signal.
- 1 9. An apparatus for determining the position of a constant
- 2 frequency interval in a telecommunication signal, said
- 3 apparatus comprising:

an analyzer for detecting an occurrence of said constant frequency interval in said telecommunication signal;

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a noise-reducing filter unit for obtaining a plurality
of noise-reduced signal values by a noise-reducing

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11		processing of at least a part of said constant
12		frequency interval in said telecommunication signal;
13		
14		a coefficient generator using said noise-reduced signal
15		values for adapting a filter to the frequency of said
16		constant frequency interval;
17		\
18		said filter filtering said telecommunication signal for
19		generating filtered output values; and
20		
21		a position detector for determining a predefined
22		reference point of said constant frequency interval on
23		the basis of said filtered output values.
1	10.	The apparatus of claim 9, wherein the apparatus is a



mobile telephone.